

Accepted Manuscript

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PII: S1367-9120(18)30058-0
DOI: <https://doi.org/10.1016/j.jseaes.2018.02.012>
Reference: JAES 3418

To appear in: *Journal of Asian Earth Sciences*

Received Date: 1 June 2017
Revised Date: 21 February 2018
Accepted Date: 21 February 2018

Please cite this article as: Basril Iswadi Basori, M., Gilbert, S., Raymond Large, R., Zaw, K., Textures and trace element composition of pyrite from the Bukit Botol volcanic-hosted massive sulphide deposit, Peninsular Malaysia, *Journal of Asian Earth Sciences* (2018), doi: <https://doi.org/10.1016/j.jseaes.2018.02.012>

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ABSTRACT

The Bukit Botol volcanic-hosted massive sulphide (VHMS) deposit is located in the Central Belt of Peninsular Malaysia. The deposit occurs in a package of Permian-aged coherent felsic volcanic and volcanoclastic rocks which have a geochemical signature indicative of a volcanic arc tectonic setting. Mineralisation shows distinct ore zonation, forming a stringer to massive sulphide zone at the footwall followed by barite lenses and exhalite layers (Fe-Mn ore) at the top. Mineralogy is characterised by pyrite as the major sulphide mineral, with minor chalcopyrite, sphalerite, and rare galena; traces of gold, silver- and tin-bearing minerals also occur in the massive sulphide and barite ores. Laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) analysis combined with the textural characteristics of pyrite provides evidence for significant variations of trace elements in different pyrite types at Bukit Botol, having three types of pyrite in the paragenetic sequence. The concentrations

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